

Patent Claims

1. A method for reducing bandwidth when transmitting data over voice connection paths that are routed at least sections-wise in a digital data network (4), ~~characterized in that~~ **where** both the sending and the receiving terminals (1) use a generally identical **modulation** method for transmitting data in voice connection paths, but the useful information to be transmitted is transported in one or more sections via a data network (4, 7), the modulation method specified by the terminal (1) not being used over the entire transmission link in direct manner via one or more switching nodes (2) or in indirect manner via a data network (4), but rather **a conversion of the coding of the useful information between the data transmission in the digitally transmitting voice connection path and the data transmission in the digital data network first being carried out within the data network (4), so that on some sections of the data network (4), the useful information is transmitted via the coded voice connection path, and on the other sections of the data network (4), the useful information is transmitted** ~~transmission in the digital data network (7) being effected~~ by a method suitable for digital data networks; it further being the case that there is no need for a functional matching of the terminals (1) or for the terminals (1) to be adapted to the transmission characteristics of the digital data network for the transmission of the useful information.
2. The method as recited in Claim 1, characterized in that the inclusion of a digital data network (7) in the voice connection path used for data transmission is effected automatically by a context-related call-number translation during the connection setup, this not being perceived by the terminals (1) using the voice connection path.
3. The method as recited in Claim 2, characterized in that the inclusion of the digital data network (7) in the voice connection path used for data transmission is effected, such that the end-to-end

signaling of the terminals (1), which is required for the control of the data transport, is terminated at the transition (6) into the digital data network (7) used for the transmission and is regenerated in order to thus integrate the control of the data transport by the digital network into this end-to-end signaling.

4. The method as recited in one or more of Claims 1 through 3, characterized in that, to match different methods used by the terminals (1) for data transmission, suitable temporary storage and conversion of the transmitted data and signaling information are carried out, the terminals (1) involved in the data transmission not being aware of the use of different transmission methods.

5. The method as recited in one or more of Claims 1 through 4, characterized in that the useful information is split into individual data packets for its transmission over the digital data network (7), the transmission rate of the packets being flexibly adapted at the network transitions (6) to the bit rate actually being transmitted by the terminal (1).

6. The method as recited in one or more of Claims 1 through 5, characterized in that at least one of the terminals (1) is connected directly or via a digital transmission link to the digital data network, so that the data need not first be coded by the terminal (1) for its transmission in the voice connection path and then decoded again.

7. The method as recited in one or more of Claims 1 through 6, characterized in that the method is implemented in a data network which is a generally accessible data network or is made up of an interconnection of a plurality of generally accessible data networks.

8. The method as recited in one or more of Claims 1 through 7, characterized in that the useful information to be transmitted conforms to the features



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Figure 6 in **Table 1**